

Attachment 9
Compared Effects of Adjustment on Facility QM Rankings: Overall Movement
from Highest and Lowest QM Deciles

Quality Measure	Category	FAP-Adjusted	Old Covariates	New Covariates
CBEH04	% moved from Decile 1 to 2-5	1.23	0.82	0.60
	% moved from Decile 10 to 5-9	2.78	1.50	1.25
	% Non-Movers	49.09	64.88	68.80
	Mean Difference for Movers	0.018	0.0114	0.0099
	Correlation:obs/adj	0.926	0.977	0.984
CCNT03	% moved from Decile 1 to 2-5	1.71	1.50	1.27
	% moved from Decile 10 to 5-9	2.36	2.02	1.91
	% Non-Movers	47.40	51.39	53.40
	Mean Difference for Movers	0.0286	0.0259	0.0223
	Correlation:obs/adj	0.944	0.958	0.967
CCOM01	% moved from Decile 1 to 2-5	0.61	0.51	0.63
	% moved from Decile 10 to 5-9	1.13	0.94	1.19
	% Non-Movers	69.55	75.17	69.66
	Mean Difference for Movers	0.0127	0.0105	0.0129
	Correlation:obs/adj	0.986	0.991	0.986
CMOB01	% moved from Decile 1 to 2-5	1.63	0.85	1.05
	% moved from Decile 10 to 5-9	2.24	1.29	1.51
	% Non-Movers	46.92	66.80	59.21
	Mean Difference for Movers	0.0253	0.0148	0.0183
	Correlation:obs/adj	0.949	0.986	0.977
CNUT01	% moved from Decile 1 to 2-5	3.54	3.35	4.21
	% moved from Decile 10 to 5-9	4.73	2.44	5.78
	% Non-Movers	36.98	52.86	28.85
	Mean Difference for Movers	0.0316	0.0165	0.0341
	Correlation:obs/adj	0.735	0.957	0.713
CPAI0X	% moved from Decile 1 to 2-5	2.10	1.03	1.18
	% moved from Decile 10 to 5-9	3.96	1.26	1.49
	% Non-Movers	36.08	65.67	60.83
	Mean Difference for Movers	0.0395	0.0169	0.0197
	Correlation:obs/adj	0.841	0.983	0.976
CPRU04	% moved from Decile 1 to 2-5	2.85	2.70	0.74
	% moved from Decile 10 to 5-9	4.22	3.35	2.58
	% Non-Movers	32.81	37.68	53.12
	Mean Difference for Movers	0.0228	0.0203	0.0113
	Correlation:obs/adj	0.822	0.883	0.945
CWGT01	% moved from Decile 1 to 2-5	1.05	0.95	1.48
	% moved from Decile 10 to 5-9	1.75	1.36	2.76
	% Non-Movers	59.99	66.22	45.90
	Mean Difference for Movers	0.0119	0.0107	0.0174
	Correlation:obs/adj	0.970	0.978	0.932
PPRU0X	% moved from Decile 1 to 2-5	3.35	1.83	3.05
	% moved from Decile 10 to 5-9	5.60	2.39	4.66
	% Non-Movers	22.87	43.99	28.04
	Mean Difference for Movers	0.0729	0.037	0.0691
	Correlation:obs/adj	0.628	0.941	0.776
PRSP0X	% moved from Decile 1 to 2-5	2.84	0.76	1.88
	% moved from Decile 10 to 5-9	2.88	2.75	2.97
	% Non-Movers	45.16	78.71	53.96
	Mean Difference for Movers	0.0252	0.0107	0.0167
	Correlation:obs/adj	0.925	0.994	0.966

Note: Correlation coefficients are in bold font

Shaded cells show where the new covariates perform "better" than alternative models

Better means: 1) higher percent moving from the extreme deciles to the middle deciles;

2) a smaller percent of non-movers; 3) a larger mean percentage point difference for movers;

4) a smaller correlation coefficient.

**Compared Effects of Adjustment on Facility QM Rankings: Overall Movement
from Highest and Lowest QM Deciles**

Quality Measure	Category	FAP-Adjusted	Old Covariates	New Covariates
CBEH01	% moved from Decile 1 to 2-5	1.81		1.30
	% moved from Decile 10 to 5-9	3.39		1.59
	% Non-Movers	39.29		57.30
	Mean Difference for Movers	0.0509		0.0305
	Correlation:obs/adj	0.870		0.974
CBEH02	% moved from Decile 1 to 2-5	1.68		0.91
	% moved from Decile 10 to 5-9	3.34		1.31
	% Non-Movers	40.19		64.68
	Mean Difference for Movers	0.0545		0.0282
	Correlation:obs/adj	0.882		0.983
CBEH03	% moved from Decile 1 to 2-5	2.99		2.79
	% moved from Decile 10 to 5-9	2.11		1.62
	% Non-Movers	51.93		58.95
	Mean Difference for Movers	0.0159		0.014
	Correlation:obs/adj	0.954		0.967
CBMI0X	% moved from Decile 1 to 2-5	1.36		1.51
	% moved from Decile 10 to 5-9	2.40		2.15
	% Non-Movers	50.54		50.51
	Mean Difference for Movers	0.0211		0.0182
	Correlation:obs/adj	0.947		0.963
CCNT01	% moved from Decile 1 to 2-5	3.61		4.06
	% moved from Decile 10 to 5-9	3.76		4.36
	% Non-Movers	29.67		24.19
	Mean Difference for Movers	0.0729		0.087
	Correlation:obs/adj	0.843		0.701
CCNT05	% moved from Decile 1 to 2-5	2.36		5.07
	% moved from Decile 10 to 5-9	5.17		5.79
	% Non-Movers	44.88		27.35
	Mean Difference for Movers	0.0184		0.0355
	Correlation:obs/adj	0.942		0.721
CCNT06	% moved from Decile 1 to 2-5	3.00		3.57
	% moved from Decile 10 to 5-9	3.86		4.50
	% Non-Movers	32.27		25.64
	Mean Difference for Movers	0.0718		0.0872
	Correlation:obs/adj	0.870		0.751
CDRG01	% moved from Decile 1 to 2-5	2.05		1.94
	% moved from Decile 10 to 5-9	4.21		3.11
	% Non-Movers	33.79		40.08
	Mean Difference for Movers	0.0538		0.0382
	Correlation:obs/adj	0.825		0.912
CDRG02	% moved from Decile 1 to 2-5	2.82		1.15
	% moved from Decile 10 to 5-9	2.94		1.41
	% Non-Movers	40.74		68.12
	Mean Difference for Movers	0.0644		0.0297
	Correlation:obs/adj	0.907		0.986
CDRG03	% moved from Decile 1 to 2-5	1.69		1.27
	% moved from Decile 10 to 5-9	3.93		2.40
	% Non-Movers	36.63		49.30
	Mean Difference for Movers	0.0471		0.0273
	Correlation:obs/adj	0.849		0.95
CINFOX	% moved from Decile 1 to 2-5	1.57		1.49
	% moved from Decile 10 to 5-9	3.11		2.43
	% Non-Movers	42.95		49.25
	Mean Difference for Movers	0.0301		0.024
	Correlation:obs/adj	0.924		0.947

Quality Measure	Category	FAP-Adjusted	Old Covariates	New Covariates
CPRU01	% moved from Decile 1 to 2-5	1.12		2.22
	% moved from Decile 10 to 5-9	3.32		4.46
	% Non-Movers	45.48		34.08
	Mean Difference for Movers	0.0197		0.0261
	Correlation:obs/adj	0.912		0.835
CPRU02	% moved from Decile 1 to 2-5	1.11		1.84
	% moved from Decile 10 to 5-9	2.36		3.17
	% Non-Movers	51.88		40.24
	Mean Difference for Movers	0.0228		0.0292
	Correlation:obs/adj	0.951		0.915
CPRU03	% moved from Decile 1 to 2-5	6.87		7.37
	% moved from Decile 10 to 5-9	2.29		2.50
	% Non-Movers	43.74		40.21
	Mean Difference for Movers	0.0078		0.0086
	Correlation:obs/adj	0.945		0.927
CWALOX	% moved from Decile 1 to 2-5	1.66		1.30
	% moved from Decile 10 to 5-9	1.15		1.01
	% Non-Movers	57.56		63.35
	Mean Difference for Movers	0.019		0.0158
	Correlation:obs/adj	0.976		0.984
PCNTOX	% moved from Decile 1 to 2-5	4.76		4.33
	% moved from Decile 10 to 5-9	4.33		4.15
	% Non-Movers	22.13		27.03
	Mean Difference for Movers	0.0971		0.0873
	Correlation:obs/adj	0.674		0.785
PPAIOX	% moved from Decile 1 to 2-5	3.20		1.82
	% moved from Decile 10 to 5-9	5.78		2.33
	% Non-Movers	22.46		46.49
	Mean Difference for Movers	0.0982		0.0472
	Correlation:obs/adj	0.623		0.952
PWALOX	% moved from Decile 1 to 2-5	2.24		1.47
	% moved from Decile 10 to 5-9	3.52		2.13
	% Non-Movers	36.27		50.34
	Mean Difference for Movers	0.0651		0.0437
	Correlation:obs/adj	0.891		0.959

Note: Correlation coefficients are in bold font

Shaded cells show where the new covariates perform "better" than alternative models

Better means: 1) higher percent moving from the extreme deciles to the middle deciles;

2) a smaller percent of non-movers; 3) a larger mean percentage point difference for movers;

4) a smaller correlation coefficient.

**Compared Effects of Adjustment on Facility QM Rankings: Overall Movement
from Highest and Lowest QM Deciles**

Quality Measure	Category	FAP-Adjusted	Old Covariates	New Covariates
CCAT02	% moved from Decile 1 to 2-5		0.99	1.26
	% moved from Decile 10 to 5-9		2.86	3.79
	% Non-Movers		47.19	41.14
	Mean Difference for Movers		0.0162	0.0191
	Correlation:obs/adj		0.929	0.861
CCNT02	% moved from Decile 1 to 2-5		1.85	1.63
	% moved from Decile 10 to 5-9		2.74	3.05
	% Non-Movers		44.70	44.63
	Mean Difference for Movers		0.0313	0.0305
	Correlation:obs/adj		0.934	0.932
CAFL01	% moved from Decile 1 to 2-5		0.92	1.05
	% moved from Decile 10 to 5-9		2.05	2.36
	% Non-Movers		55.11	52.62
	Mean Difference for Movers		0.0142	0.0157
	Correlation:obs/adj		0.966	0.957
PADLOX	% moved from Decile 1 to 2-5		0.53	1.28
	% moved from Decile 10 to 5-9		0.34	1.13
	% Non-Movers		83.74	59.31
	Mean Difference for Movers		0.0182	0.0438
	Correlation:obs/adj		0.997	0.979

Note: Correlation coefficients are in bold font

Shaded cells show where the new covariates perform "better" than alternative models

Better means: 1) higher percent moving from the extreme deciles to the middle deciles;

2) a smaller percent of non-movers; 3) a larger mean percentage point difference for movers;

4) a smaller correlation coefficient.

**Compared Effects of Adjustment on Facility QM Rankings: Overall Movement
from Highest and Lowest QM Deciles**

Quality Measure	Category	FAP-Adjusted	Old Covariates	New Covariates
CCOG01	% moved from Decile 1 to 2-5	0.36	0.36	
	% moved from Decile 10 to 5-9	0.61	0.63	
	% Non-Movers	82.45	82.78	
	Mean Difference for Movers	0.0079	0.0079	
	Correlation:obs/adj	0.995	0.996	
CMOD03	% moved from Decile 1 to 2-5	1.85	1.33	
	% moved from Decile 10 to 5-9	2.36	0.75	
	% Non-Movers	47.13	71.25	
	Mean Difference for Movers	0.0268	0.0147	
	Correlation:obs/adj	0.943	0.987	
CPAN01	% moved from Decile 1 to 2-5	1.11	0.45	
	% moved from Decile 10 to 5-9	2.73	0.95	
	% Non-Movers	49.94	78.29	
	Mean Difference for Movers	0.0196	0.0082	
	Correlation:obs/adj	0.950	0.994	
PDELOX	% moved from Decile 1 to 2-5	7.49	7.00	
	% moved from Decile 10 to 5-9	3.89	0.25	
	% Non-Movers	28.98	66.74	
	Mean Difference for Movers	0.0201	0.006	
	Correlation:obs/adj	0.741	0.996	

Note: Correlation coefficients are in bold font

**Compared Effects of Adjustment on Facility QM Rankings: Overall Movement
from Highest and Lowest QM Deciles**

Quality Measure	Category	FAP-Adjusted	Old Covariates	New Covariates
CBUROX	% moved from Decile 1 to 2-5	0.42		
	% moved from Decile 10 to 5-9	2.70		
	% Non-Movers	54.98		
	Mean Difference for Movers	0.0152		
	Correlation:obs/adj	0.936		
CDEL0X	% moved from Decile 1 to 2-5	0.38		
	% moved from Decile 10 to 5-9	2.16		
	% Non-Movers	61.83		
	Mean Difference for Movers	0.0226		
	Correlation:obs/adj	0.936		
CCAT01	% moved from Decile 1 to 2-5		6.90	
	% moved from Decile 10 to 5-9		0.90	
	% Non-Movers		60.78	
	Mean Difference for Movers		0.0042	
	Correlation:obs/adj		0.986	
CADL03	% moved from Decile 1 to 2-5			1.28
	% moved from Decile 10 to 5-9			2.37
	% Non-Movers			50.67
	Mean Difference for Movers			0.0382
	Correlation:obs/adj			0.961
CSOC02	% moved from Decile 1 to 2-5			3.57
	% moved from Decile 10 to 5-9			1.24
	% Non-Movers			65.43
	Mean Difference for Movers			0.0181
	Correlation:obs/adj			0.984

Note: Correlation coefficients are in bold font